

ABSTRACT

The invention concerns an image sensor device consisting of a semiconductive carrier (substrate) (1), especially in a CMOS design, on which is an arrangement of pixels, and each pixel is assigned a photosensitive detector (4), means to photoelectrically convert a detected photosignal into an electrical signal, and electrical storage means (3) to store the electrical signal, whereby a storage control device (2) is provided to store the electrical signals related to each pixel and read them out in a controlled manner. The problem of developing an image sensor to more effectively use the chip area and allow the sensor to be used in high-speed cameras is solved according to the invention by designing the storage control (2) so that in a single pixel the sequentially-recorded, photoelectrically-transformed signals can be stored in different storage means (3) and they can be read out of the storage means at a given time.

Provided for publication: Fig. 1